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HUMAN-ARTIFICIAL INTELLIGENCE DIALOGUE: IN THE CONTEXT OF HUMANISM AND THE EPISTEMOLOGICAL MEANINGS OF INTELLECTUAL VIRTUE

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Abstract. The article takes a philosophical look at the possibility and peculiarities of human-artificial intelligence dialogue in the light of modern epistemological principles. In the approach, the interaction of the concepts of "natural consciousness", "artificial consciousness", "artificial intelligence", "double contingency", "recursiveness", "implicit knowledge", "obvious knowledge" is considered as a systematic theoretical-methodological categorical apparatus. At this time, the relations of these concepts are examined against the background of the concepts of "humanism" and "intellectual virtue" and within the principle of dialogicity of consciousness. The main scientific goal of the research is related to the highlighted features. It is shown that human-artificial intelligence dialogue as a whole is possible in the aspect of the principle of humanism. However, this issue should have its own mechanism of realization in the philosophical and epistemological context. In that quality, the article puts forward the thesis that "intellectual virtue" can play a constructive role. At the same time, the place and role of double contingency and recursion phenomena are important among the epistemological conditions of the possibility of human-artificial intelligence dialogue in the context of humanism. Double contingency defines the epistemological boundary of that dialogue. Recursiveness plays the role of its cognitive mechanism in the aspect of continuity and gradual realization of the process.

Key words: artificial consciousness, artificial intelligence, double contingency, recursion, obvious knowledge, implicit knowledge, social sensitivity, cognitive, dialogicity of consciousness.

Introduction. Philosophical understanding of artificial intelligence and its beneficial use is currently considered one of the most urgent problems. As a phenomenon, artificial intelligence is a rather complex phenomenon. In addition to cognitive aspects such as its creation, functions, limits of intellectual capabilities, human-artificial intelligence relations in the context of society are becoming more and more relevant. A special philosophical reflection of each of these features is necessary. In particular, the issue of human-artificial intelligence relations in the context of consciousness and its impact on society as a whole is among the research targets of philosophers and representatives of individual science. It is not accidental that the relevance of the issue is related to consciousness. Because the term "artificial intelligence" itself is a sign that this phenomenon is fundamentally related to human consciousness. According to the studies included in the philosophical-scientific literature, the consciousness-artificial intelligence relationship in itself is not a simple philosophical issue and there are many aspects to it. In this article, we will try to analyze the problem only from the perspective of dialogue.

Here, when we say "dialogue", we specifically mean the philosophical understanding of the cognitive and socio-cultural features of the possible dialogue between human consciousness and "artificial intelligence" in the prism of the characteristic features and differences. Let's call human conscious-

ness "natural consciousness". The problem is that in the modern philosophical research known to us, natural consciousness-artificial consciousness relations have not been comparatively studied against the background of natural consciousness-natural consciousness relations. The main philosophical point here is related to clarifying the epistemological boundaries of these two different dialogues. In itself, the study of the problem in this aspect also requires broad, comprehensive and different approaches. Therefore, making the scientific goal of the article a little more specific, we look at the dialogue between human consciousness and "artificial consciousness" in the prism of the concepts of "humanism", "recursiveness", "intellectual virtue", "double contingency", "implicit knowledge" and "obvious knowledge". This kind of concretization of the issue is related to accepting deep connections of artificial intelligence with ethical consciousness as a whole. In this sense, the concept of "humanism" plays the role of a general theoretical "umbrella" for us. Within it, intellectual virtue, double contingency, recursion, non-obvious knowledge and obvious knowledge are explored in close interaction with each other in connection with the dialogicity of consciousness in the purely cognitive aspect.

Finally, the purpose of investigating the problem in the highlighted direction is to analyze both the cognitive boundaries of that dialogue (against the background of the presence of double contingency, implicit and explicit knowledge conditions) and whether it is possible to apply intellectual virtue to it, under the condition of accepting the possibility of natural consciousness-artificial consciousness dialogue. In order to achieve the scientific goal set in the article, a systematic approach was used within the framework of post-non-classical rationality. In this case, interdisciplinary methodology is applied. Non-linearity, intersubjectivity, comparative analysis and synergetic synthesis were selected as the main methodological principles.

Discussion. Systematic analysis of complex dynamics and dynamic integration are applied as methods. Here, the "systematic analysis of complex dynamics" method is designed to adequately understand the complexity of natural consciousness-artificial consciousness interactions under the conditions of recursion and double contingency. "Dynamic integration" is mainly to create a philosophical-scientific image of the synthetic landscape within the framework of the complexity paradigm.

First, let's take a look at the philosophical content of the concepts in the light of the highlighted features of the approach.

1. Philosophical explanation of concepts and dialogicity of consciousness

a) Artificial intelligence and artificial consciousness

Artificial intelligence is used in this article in the commonly accepted sense. Artificial intelligence (in English – artificial intelligence, AI) refers to an artificial intelligent system that can perform creative functions that are usually attributed to humans. At the same time, artificial intelligence is the science and technology of creating intelligent machines. This includes especially intelligent computer programs (McCarthy, 2015; Blakely, 2023).

At the same time, we should not forget the existence of different meanings of artificial intelligence. Philosophers write that in that aspect, artificial intelligence is understood as both a science and a system. I.R. Mammadzade and S.N. Dadashova prefer the meaning of artificial intelligence as a "calculation model" (Mamedzade, Dadashova, 2023, p. 208). We are satisfied with this general meaning from the point of view of the scientific research goal set in this article. At the same time, we keep in mind one feature of artificial intelligence. We mean the existence of the quality of "soft, subtle, flexible adaptation" in the meaning of artificial intelligence. That quality consists of three factors: the system's ability to correctly interpret external data, the ability to draw certain conclusions from the influence of these data, and the ability to benefit from such acquired knowledge in achieving specific goals and objectives with soft, subtle and flexible adaptation (Kaplan, Haenlein, 2019, p. 15–25). Emphasizing the possibility of soft adaptation in the meaning of artificial intelligence is important for us for two reasons. First, to note that the concept of "artificial intelligence" is complex, ambiguous

and multifunctional. Second, in the highlighted aspect, to establish the existence of meaning affinity between artificial intelligence and natural consciousness and artificial consciousness. A. Kaplan and M. Haenlein write in this connection that "artificial intelligence remains a surprisingly widespread concept and many questions related to it are still open", therefore, artificial intelligence "is not a monolithic term and needs to be looked at in detail" (Kaplan, Haenlin, 2019, p. 15–16). Finally, such a meaning of artificial intelligence gives us a certain conceptual basis to philosophically approach the dynamics of the transition from limited artificial intelligence to general artificial intelligence and from there to superintelligence in the context of comparing natural consciousness and artificial consciousness. The issue of "artificial consciousness" is more complex and widespread. This term was used by S. Thaler in his article published in 1998 (Thaler, 1998, p. 21–22). It is also called "machine consciousness", "synthetic consciousness" and "digital consciousness" (see: Smith, Scillaci, 2021, p. 530–560; Reggia, 2013, p. 112–121; Elvidge, 2018).

It is speculated that such consciousness may exist in artificial intelligence. They call it "artificial sentience" and emphasize "the existence of artificial beings with consciousness". They consider the concept of "artificial consciousness" more successful than the concepts of "digital" and "synthetic" consciousness. Because in this case, the possibility of aligning the "interests" of artificial objects with consciousness with the study of artificial intelligence expands, especially in the studies related to the ethics of artificial intelligence, it is possible to obtain more adequate results (Pauketat, 2021).

It seems clear that our approach is very close to this position. Indeed, the main cognitive goal of this article, as emphasized above, is to examine the issues of artificial intelligence in relation to consciousness in the prism of natural consciousness, artificial consciousness and the philosophical peculiarities of the dialogue between them. Let's also emphasize that since there are very different approaches to the concept of "human consciousness" as a whole, the issue of artificial intelligence is not unambiguously defined. But, in general, consciousness is understood here as self-awareness as a property of the brain and as having special conscious experience (qualias), a peculiarity belonging only to humans. At a more concrete level, differences of consciousness are not taken into account. Because if we go to such details, then the philosophical understanding of natural consciousness-artificial consciousness dialogue as a whole will be impossible. At the same time, let us emphasize here a peculiarity related to the problem of consciousness (natural and artificial consciousness alike). We mean the existence of the computational quality of consciousness in the sense of D. Chalmers. D. Chalmers believes that to have a mind at the level of self-awareness, one must have the right calculation quality. In this sense, any system that can calculate is "conscious". The difficulty here is the unity of psychological and phenomenological aspects of consciousness. And the psychological aspect can be explained, while the phenomenological aspect cannot be explained within the framework of determinism. A qualitative explanation is possible here. At the same time, the "organizational invariance" of conscious activity gives a clue to the dialogue between natural and artificial consciousness (Chalmers, 2011, p. 324–356).

Controversies and debates about the existence of "artificial consciousness" continue. This aspect of the matter is broad. Therefore, let's briefly dwell on other concepts used in this article.

b) Humanism

Humanism is a system of building society in which human life is considered the highest value. All the resources of society are directed to make human life as comfortable and safe as possible. They also present humanism as a progressive life position. At this time, the main goal is to realize oneself and strive to be more virtuous for humanity, to lead an ethical lifestyle. So, humanism in this sense is both an ability and a responsibility.

It turns out that in humanism, a person should be free to determine the form and content of his life. This shows that humanism is directly related to consciousness, thinking and intelligence. Humanism is not only a social behavior and goal, but above all a phenomenon of consciousness (Humanism and

Its Aspirations, 2007). In the philosophical-scientific literature, humanism is studied more in close connection with the concepts of posthumanism, transhumanism and technohumanism. Philosophers emphasize that those concepts are examined in interaction at the paradigmatic level. However, post-humanism does not yet have an unambiguous philosophical meaning. However, his approach to man is not anthropocentric, but is dominated by the ever-changing, evolving point of existence. From this point of view, posthumanism actually accepts the idea of humans evolving into psotins by means of leading technologies. This human type is actually "man+machine". This means that the modern evolution of man is artificial-technological in nature, and it actually makes man a part of the techno-sphere (Li, 2020). With this, the intellectual-technological potential appears as a measure of value in posthumanism, which actualizes two points: firstly, it is impossible to imagine human evolution at the modern stage without artificial technological factors, and secondly, this point, along with its positive aspects, also actualizes dangerous factors. For example, technologies can form a different human model based on human-machine comparisons. Let's say it can be posthuman (posthuman) or cyborg (sexless human-machine hybrid). From here, it can be concluded that the artificial scientific and technical reality can dominate and put human intelligence in the background." With this, it can transform the image of a person by changing the passage of time (temporality) and the concept of space as a whole (Novotny, 2021, p. 316–319).

Transhumanism has emerged as a branch of posthumanism. It is a direction in philosophy and art. In terms of value, its main feature is to transcend the human. Specifically, the possibility of different technologies penetrating human life and changing his life criteria and values is accepted. In particular, it considers it possible to expand a person's consciousness, mental and psychological abilities. Of course, it is intended to expand the basic qualities of a person, including consciousness and psychological capabilities, by means of artificial technological factors.

Thus, if we approach the human consciousness-artificial consciousness dialogue with humanism as the main goal, interesting philosophical points emerge. Here, against the background of the division of humanism into branches such as posthumanism, transhumanism, and technohumanism, we see that the technical, technological, and artificial intelligence factor is inevitably involved in the beginning of the problem. That is, in a certain sense, "a closed cognitive circle is created" – the issue of dialogue between artificial consciousness or intelligence with natural consciousness or intelligence must take place in the context of the substantial participation of technological factors from the ground up! This requires extensive research of the problem in epistemological and methodological aspects. To analyze the issue philosophically in the direction of human consciousness-artificial consciousness dialogue in the context of humanism it is necessary to examine the concepts of "double contingency", "implicit knowledge", "apparent knowledge" and the concepts of "intellectual virtue", "recursiveness" in their background in interaction and in the prism of "humanism".

c) Double contingency and recursion

The origin of the term "contingency" is Latin "contingere" and means "possible", "probable", unexpected", "happening from unknown causes", "uncertain", depending on unclear factors or conditions. It is expressed as "contingency" in English. Talcott Parsons further theoretically generalized contingency as the concept of "double contingency" in its dialogical aspect. In short, according to T. Parsons, "double contingency" is based on social action. It expresses the general epistemological situation of dialogue between "Ego" ("I") and "Alter" ("other").

T. Parsons writes that ego-alter relations are always contextual. They are the contents of the context. Contingency is a general relational situation. In this case, the decision of the "ego" is caused by the contingency of the context in which it exists. This is "single contingency". "Alter" takes a look at the decision made by "ego" and makes its own decision in that context. With this, the contingency is doubled, i.e. the decision of being in the dialogue + one's own decision. Since these two decisions take place in a specific context, under specific contingency conditions, and since those in the dialogue

are in a single act of social activity, their contingency can be taken as unity. It can be seen as a "double contingency" that pertains to dialogue as a whole. The epistemological possibility of such dialogue can be provided by the "convention" (lat. conventio – "agreement", agreement) expected by the parties (Parsons, 1968). Here, from the point of view of our approach, the important point is related to what is the epistemological content of conventionality in a possible dialogue between natural consciousness and artificial consciousness. That is, what can be the epistemological explanation of human agreement in mutual relations with artificial intelligence? The point is that artificial consciousness or artificial intelligence cannot be created outside of human consciousness – it is human consciousness that creates it! So, somewhere, the issue becomes a "closed circle" in the epistemological aspect. So, in the end, human-artificial intelligence (or, to put it more concretely and subjectively, human-robot, human-computer, human-cyborg, human-cobot (cobot – an automatic device that can produce various products together with a human) etc.) all the cognitive and social conditions of the dialogue are determined by the person in advance. Within that program, the epistemological conditions of how far artificial intelligence (even a cobot) can make independent decisions should be investigated.

Another point in the emphasized aspect is very important. The point is that "double contingency" acquires an epistemological reality, i.e., becomes possible, due to the fact that cognition enters into the situation of repeated cognition. Therefore, another epistemological rule, method – recursion, which is predetermined by the subject, plays a serious role in the possibility of dialogicity of human-artificial consciousness relations. If the epistemological expression of recursiveness is taken as "re-entry" in the sense of J. Brown, then it can be understood as the re-entry of the subject to the previous stage at each subsequent stage of the cognitive situation in the conditions of double contingency (Brown, 1969; Hui, 2019).

One of the philosophically important points is that it is possible to examine the recursive differences in the epistemological meaning of "re-entry" and the process of the observer's re-entry into the form in a single "topological context". At this point, the cognitive border zone can become a semiotic fractal due to re-entry.

It is the semiotic fractal that makes human-artificial consciousness (or artificial intelligence) dialogue possible in an epistemological aspect. Because even if the epistemological boundaries change, re-entry preserves meaning fractality between them, i.e. self-similarity, tradition, uninterrupted flow of meaning when cognitive transition is made from one side of the cognitive process to the other. Based on this, the parties in the dialogue can understand each other logically.

Here we can draw an important conclusion in the context of the epistemological mechanisms of the realization of natural consciousness-artificial consciousness dialogue within the conditions of double contingency and recursion: the aspect of logic plays a leading role in the highlighted type of dialogue! That is, since the emotions, feelings, sensations, and intuition qualities of artificial consciousness are not yet known, the logical side becomes the leading aspect of dialogue. This feature requires the explanation of three more concepts – "implicit knowledge", "manifest knowledge" and "intellectual virtue" in the cognitive aspect.

d) Concepts of "non-obvious knowledge" and "obvious knowledge"

The philosophical meaning of the concepts of "implicit knowledge" and "manifest knowledge" and their epistemological comparison can take an important place in the aspect of the possibility of dialogue between human consciousness and artificial consciousness. "Tacit knowledge" is that which can be expressed in language, symbolized, symbolized, and therefore logically expressed. Within the framework of the type of scientific rationality, obvious knowledge can be fully expressed. They exist in all fields of science and are virtually communicable knowledge. Obvious knowledge is transformed and programmed in epistemological, semantic and other aspects. But they also define a different kind of knowledge. It is called "implicit knowledge".

The concept of "tacit knowledge" was introduced by Michael Polanyi in the second half of the last century. By means of this term, he meant the part of knowledge that cannot be expressed in lan-

guage (linguistic). M. Polani figuratively expressed that "what we know is always more than what we express" (Polani, 2009).

H. Collins developed M. Polani's concept of "implicit" knowledge and divided it into 3 types (Collins, 2010). The first type is relatively inconspicuous. It can be symbolized using certain methods, including linguistic and numerical expression. The second type is somatic and is closely related to human health. It is in a certain sense embedded in habits and cannot be expressed in language. This type of tacit knowledge can also be expressed digitally. The third type of tacit knowledge is called collective tacit knowledge. It is a complex of intellectual and emotional-emotional factors of various nature that occur in the interaction of two or more people. Collective tacit knowledge is formed in society and inculcates certain rules of thought and behavior in people. H. Collins writes that collective non-obvious knowledge "emerges in the language of collectivism". Collective tacit knowledge is characterized by uncertainty and variability. It cannot be expressed only logically. This requires "social sensitivity" (Collins, 2010, p. 122–124).

Philosophers write that these qualities are absent in robots, computers, and artificial intelligence in general. Therefore, artificial intelligence "doesn't want" to make mistakes. Robots lack social sensitivity (Junge et al, 2020, p. 761–764).

All this raises a question with an epistemological meaning: can artificial consciousness (or intelligence) independently innovate science? Does an artificial being even know "what is new"? Philosophers, in search of an answer to this question, prefer the idea that only a person has the ability to be creative. Creativity is not only related to the mental and emotional qualities of the individual, but also to understand social changes.

Therefore, in order to understand the "new", it is necessary to know the dynamics of society as well as the dynamics within science. Moreover, they are manifested not separately, but in synthesis – in the unity of the cognitive-social environment under the condition of social sensitivity of the subject. This means that the visualization of collective non-obvious knowledge is a complex process and it is beyond the capabilities of artificial intelligence. This type of non-revealing, generally, cannot be revealed at the modern stage.

We can dwell on the philosophical and epistemological boundaries of the human-artificial intelligence dialogue in the prism of the philosophical meanings of the concepts emphasized in the context of the dialogicity of consciousness. For this, it is necessary to clarify the issue of whether "intellectual virtue" exists in this kind of dialogue. We will emphasize the epistemological significance of this later.

2. Epistemological boundaries of human (natural consciousness)-artificial intelligence (artificial consciousness) dialogue

If humanism is the main goal in human-artificial intelligence interactions and the issue is viewed in an epistemological context, the boundaries of transforming non-obvious knowledge into obvious knowledge should play an important role. In addition, the epistemological meaning of double contingency as a mechanism for the realization of dialogue is very important. In addition to these, we must accept that the concept of "intellectual virtue", which has recently been more intensively studied since it is about the intellect, can play an important role in determining the epistemological boundaries of that dialogue. First, let's dwell on the general philosophical and epistemological aspects of this concept.

Even Aristotle in his "Nicomachean Ethics" divided virtue into ethical and intellectual types. In his understanding, intellectual virtue included being intelligent, thoughtful and wise (Aristotle, 2020). However, only from the second half of the 20th century, attempts to accept "virtue epistemology" as "normative" of understanding have begun, against the background of uncertainty manifested in epistemology. Here, the question of the place and role of values (spiritual and intellectual) in philosophical and scientific cognition was the main subject of research. Different positions have emerged in the context of both the signs of intellectual virtue and the approach to it in the prism of scientific truth (Pritchart, 2021; Ryan, 2021; Greco, 2021, etc.).

Philosophers show different signs of intellectual virtue. This includes "openness of mind", "intellectual masculinity", "intellectual courage", "intellectual generosity", "wisdom", etc. such virtues are attributed. It should be emphasized that an article by Duncan Pritchart played a stimulating role in this process (see: Pritchart, 2021, p. 22–37). In that article, D. Pritchart puts forward the thesis that scientific truth is a more fundamental concept based on the thesis that the intellectually virtuous researcher loves the truth. In other words, in modern scientific activity, the virtue of the intellect is considered as an important condition, but the fact that the virtue serves the scientific truth is taken as a basis.

R. Shane believes that wisdom is a more fundamental concept. He writes that "the scholar of intellectual virtue loves wisdom to the extreme." Wisdom is the highest virtue, and truth should serve it (Ryan, 2021, p. 61).

In the context of D. Pritchart's approach, J. Greco puts forward the idea that "truth should be compared with epistemic value" in each case (Greco, 2021, p. 46). It is clear from this that J. Greco takes the problem in a broader and pluralistic aspect. Here attention is drawn to the interaction between scientific truth and values. That is, the social epistemological approach shows itself (Greco, 2021, p. 47–52).

Thus, intellectual virtue generally refers to having the characteristic of "goodness of intellect", "peacefulness", "reliability", "responsibility", "wisdom", etc., which expresses a high moral quality.

The main epistemological issue in the human-artificial intelligence dialogue is closely related to this feature. So how can artificial intelligence be virtuous? Or how can he know to be virtuous?

Thus, if we look at the concepts whose philosophical-epistemological meanings we tried to systematize above in the context of the dialogicity of the council as a single categorical system, then we will come to the conclusion that the real "customer" in the human-artificial intelligence dialogue is a human being. In any case, artificial intelligence (or artificial consciousness) is created by a person and determines the cognitive limits of the pre-created by means of programs. At this point, double contingency defines the main epistemological boundary of artificial intelligence. So, the artificial intelligence is still bound to respond to the decisions made by the person within the framework of the cognitive capabilities determined by the person in advance.

Artificial intelligence can make smart and logical decisions. However, that decision can be made within the framework of a person's pre-determined thinking, along with a person's pre-decided decision. Therefore, in the human-artificial intelligence dialogue, one of the parties (artificial intelligence) actually has a double dependence within the framework of double contingency – the order of the dialogue, the one who determines the mechanism of its realization and the one who forms the conclusion is the human. Here, of course, there may be some findings of artificial intelligence, but this relative creative peculiarity does not change the "big dialog picture": the dialog depends on the person!

It turns out that robots, computers, cyborgs, cobots, etc. accusing artificial beings of aggression or demanding intellectual virtue independently of them is not philosophically uncontroversial. How artificial beings are depends on natural consciousness. In other words, artificial beings cannot be virtuous by themselves without human will!

Conclucions. We can draw a number of philosophical conclusions from the analysis. First, let's emphasize that human-artificial intelligence dialogue is possible in principle. The "orderer" of this and the leading role in its realization is played by man (natural consciousness) in any options.

Epistemologically, the principle of humanism can be put in the context of natural consciousness-artificial consciousness dialogue. Against this background, it is possible to look at the issue of whether intellectual virtue is specific to artificial intelligence or not. But it's up to humans to expect virtue from AI on its own. It is impossible for virtue to exist "naturally" in the intellect of an artificial being. Because here the nature of the mechanism of revealing non-obvious knowledge, social sensitivity, emotional factors, etc. points that do not belong to the artificial entity show their influence. For example, an artificial being may understand wisdom in a logical framework, but not

feel it in the context of social sensitivity. An artificial being cannot independently "see" the sensory, emotional and mental layers of socialization and acculturation in society. Because of all this, virtue in human-artificial intelligence dialogue depends on the human. Man himself should be humane, kind, wise, progressive and peace-loving, so that the virtue factor in his dialogue with artificial intelligence serves humanism!

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